permitting transportation system personnel, or recorded or digitized human speech messages, to announce stations and provide other passenger information. Alternative systems or devices which provide equivalent access are also permitted.

(b) [Reserved]

Subpart E—Commuter Rail Cars and Systems

§38.91 General.

- (a) New, used and remanufactured commuter rail cars, to be considered accessible by regulations in part 37 of this title, shall comply with this subpart.
- (b) If portions of the car are modified in such a way that it affects or could affect accessibility, each such portion shall comply, to the extent practicable, with the applicable provisions of this subpart. This provision does not require that inaccessible cars be retrofitted with lifts, ramps or other boarding devices.
- (c)(1) Commuter rail cars shall comply with §§38.93(d) and 38.109 of this part for level boarding wherever structurally and operationally practicable.
- (2) Where level boarding is not structurally or operationally practicable, commuter rail cars shall comply §38.95 of this part.
- (d) Existing vehicles retrofitted to comply with the "one-car-per-train rule" at §37.93 of this title shall comply with §§ 38.93(e), 38.95(a) and 38.107 of this part and shall have, in new and key stations at least one door on each side from which passengers board which complies with §38.93(d) of this part. Vehicles previously designed and manufactured in accordance with the program accessibility requirements of section 504 of the Rehabilitation Act of 1973, or implementing regulations of the Secretary of Transportation that were in effect before October 7, 1991; and which can be entered and used from stations in which they are to be operated, may be used to satisfy the requirements of §37.93 of this title.

§38.93 Doorways.

(a) Clear width. (1) At least one door on each side of the car from which passengers board opening onto station

platforms and at least one adjacent doorway into the passenger coach compartment, if provided, shall have a minimum clear opening of 32 inches.

- (2) If doorways connecting adjoining cars in a multi-car train are provided, and if such doorway is connected by an aisle with a minimum clear width of 30 inches to one or more spaces where wheelchair or mobility aid users can be accommodated, then such doorway shall have, to the maximum extent practicable in accordance with the regulations issued under the Federal Railroad Safety Act of 1970 (49 CFR parts 229 and 231), a clear opening of 30 inches.
- (b) Passageways. A route at least 32 inches wide shall be provided from doors required to be accessible by paragraph (a)(1) of this section to seating locations complying with §38.95(d) of this part. In cars where such doorways require passage through a vestibule, such vestibule shall have a minimum width of 42 inches. (See Fig. 3.)
- (c) Signals. If doors to the platform close automatically or from a remote location, auditory and visual warning signals shall be provided to alert passengers or closing doors.
- (d) Coordination with boarding platform—(1) Requirements. Cars operating in stations with high platforms, or mini-high platforms, shall be coordinated with the boarding platform design such that the horizontal gap between a car at rest and the platform shall be no greater than 3 inches and the height of the car floor shall be within plus or minus ½ inch of the platform height. Vertical alignment may be accomplished by car air suspension, platform lifts or other devices, or any combination.
- (2) Exception. New vehicles operating in existing stations may have a floor height within plus or minus 1½ inches of the platform height. At key stations, the horizontal gap between at least one accessible door of each such vehicle and the platform shall be no greater than 3 inches.
- (3) Exception. Where platform setbacks do not allow the horizontal gap or vertical alignment specified in paragraph (d)(1) or (d)(2) of this section, car, platform or portable lifts complying with §38.95(b) of this part, or car

§ 38.95

or platform ramps or bridge plates, complying with §38.95(c) of this part, shall be provided.

(4) Exception. Retrofitted vehicles shall be coordinated with the platform in new and key stations such that the horizontal gap shall be no greater than 4 inches and the height of the vehicle floor, under 50% passenger load, shall be within plus or minus 2 inches of the platform height.

(e) Signage. The International Symbol of Accessibility shall be displaced on the exterior of all doors complying with this section unless all cars are accessible and are not marked by the access symbol (see Fig. 6). Appropriate signage shall also indicate which accessible doors are adjacent to an accessible restroom, if applicable.

§ 38.95 Mobility aid accessibility.

(a)(1) General. All new commuter rail cars, other than level entry cars, covered by this subpart shall provide a level-change mechanism or boarding device (e.g., lift, ramp or bridge plate) complying with either paragraph (b) or (c) of this section; sufficient clearances to permit a wheelchair or mobility aid user to reach a seating location; and at least two wheelchair or mobility aid seating locations complying with paragraph (d) of this section.

(2) Exception. If portable or platform lifts, ramps or bridge plates meeting the applicable requirements of this section are provided on station platforms or other stops required to be accessible. or mini-high platforms complying with §38.93(d) are provided, the car is not required to be equipped with a car-borne device. Where each new car is compatible with a single platform-mounted access system or device, additional systems or devices are not required for each car provided that the single device could be used to provide access to each new car if passengers using wheelchairs or mobility aids could not be accommodated on a single car.

(b) Car Lift—(1) Design load. The design load of the lift shall be at least 600 pounds. Working parts, such as cables, pulleys, and shafts, which can be expected to wear, and upon which the lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the

material. Nonworking parts, such as platform, frame, and attachment hardware which would not be expected to wear, shall have a safety factor of at least three, based on the ultimate strength of the material.

(2) Controls—(i) Requirements. The controls shall be interlocked with the car brakes, propulsion system, or door, or shall provide other appropriate mechanisms or systems, to ensure that the car cannot be moved when the lift is not stowed and so the lift cannot be deployed unless the interlocks or systems are engaged. The lift shall deploy to all platform levels normally encountered in the operating environment. Where provided, each control for deploying, lowering, raising, and stowing the lift and lowering the roll-off barrier shall be of a monetary contact type requiring continuous manual pressure by the operator and shall not allow improper lift sequencing when the lift platform is occupied. The controls shall allow reversal of the lift operation sequence, such as raising or lowering a platform that is part way down, without allowing an occupied platform to fold or retract into the stowed position.

(ii) Exception. Where physical or safety constraints prevent the deployment at some stops of a lift having its long dimension perpendicular to the car axis, the transportation entity may specify a lift which is designed to deploy with its long dimension parallel to the car axis and which pivots into or out of the car while occupied (i.e., "rotary lift"). The requirements of paragraph (b)(2)(i) of this section prohibiting the lift from being stowed while occupied shall not apply to a lift design of this type if the stowed position is within the passenger compartment and the lift is intended to be stowed while

(iii) Exception. The brake or propulsion system interlock requirement does not apply to a platform mounted or portable lift provided that a mechanical, electrical or other system operates to ensure that cars do not move when the lift is in use.

(3) Emergency operation. The lift shall incorporate an emergency method of deploying, lowering to ground or platform level with a lift occupant, and